

PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.0660-00000

distinctly claim the subject matter Applicants regard as their invention. In addition, claims 15-33 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,196,190 to Gehman et al. Claims 15-33 were also rejected under § 103(a) as obvious over Gehman et al. in view of U.S. Patent No. 4,543,249 to Nelson.

In response, Applicants have amended claims 15, 20, 28, and 32. No new matter has been added by this Amendment. The amended claims have not been narrowed in scope through this Amendment, merely clarified according to the Examiner's Instructions. Applicants therefore submit that all claims, as amended, are allowable, and therefore respectfully request that the Examiner withdraw all rejections in light of the arguments below.

**The Claims, as Amended, Are Not Indefinite Under 35 U.S.C § 112**

The Examiner rejected claims 15, 20, 21, 28, and 32 for failing to comply with 35 U.S.C. § 112, second paragraph. In addition to the arguments set forth below, Applicants have amended the claims in order to more clearly claim the present invention. Applicants therefore submit that the claims as amended are allowable, and ask the Examiner to withdraw the § 112 rejections.

The Examiner rejected claim 15 because the limitation "said keratinous fibers" lacked sufficient antecedent basis. Additionally, the Examiner asserted that claim 15 was confusing because "insoluble particles of fixing polymer" was unclear. Finally, the Examiner rejected claim 15 because it was unclear what is meant by "from drying to said keratinous fibers."

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

PATENT  
 Customer No. 22,852  
 Attorney Docket No. 05725.0660-00000

In response, Applicants have deleted the term "said" which preceded "keratinous fibers," as suggested by the Examiner. Applicants have also amended the claim to read "from drying said composition to said keratinous fibers." Applicants respectfully submit that these amendments place the claim in proper form. Applicants have not amended the claim to add the word "a" before "fixing polymer," as suggested by the Examiner, because such amendment is not necessary. As written, the claim recites "at least one aqueous dispersion of insoluble particles of fixing polymer." The presence of the word "a" prior to "fixing polymer" is unnecessary to render the claim definite.

Applicants have also amended claims 20, 28, and 32 as suggested by the Examiner. Therefore, Applicants submit that the claims as amended are allowable.

The Examiner rejected claim 21 as "vague and confusing because it is unclear which compounds are used to make the fixing polymer." The Examiner suggests separating the monomers by commas or the word "or." Applicants have not amended claim 21, because the claim as written is not "vague and confusing." One skilled in the art would understand that the claim terms "wherein said fixing polymer is chosen from ethyl acrylate/methyl methacrylate/methacrylic acid/acrylic acid copolymers" refers to copolymers comprising the four monomers listed. The use of such terminology to describe copolymers is well known in the art. See Gehman et al., column 1, lines 25-27. Therefore, withdrawal of this rejection is respectfully requested.

**The Claimed Invention is not Anticipated Under § 102(b) by Gehman et al.**

The Examiner rejected all pending claims under § 102(b) as anticipated by Gehman et al. According to the Examiner, Gehman et al. disclose hair spray resins with

FINNEGAN  
 HENDERSON  
 FARABOW  
 GARRETT &  
 DUNNER LLP

1300 18th St. NW  
 Washington, DC 20005  
 202.408.4000  
 Fax 202.408.4400  
 www.finnegan.com

PATENT  
 Customer No. 22,852  
 Attorney Docket No. 05725.0660-00000

superior moisture resistance, excellent shampoo removability, and good aesthetic properties. The resins are said to be acrylic copolymers of alkyl acrylates, methyl methacrylate, hydroxyethyl methacrylate, and methacrylic acid. The Examiner states that these are "the specific fixing polymers" of claims 20 and 21 of the present invention.

The Examiner also asserts that Gehman et al. disclose that the resins have a glass transition temperature of between 40-80°C, that silicones, plasticizers and other adjuvants may be combined with the polymers, and that the polymer may be incorporated into aerosol or pump type hair spray formulations. While the Examiner admits that the reference does not specifically disclose that the compositions have a mean sticking energy of less than 200  $\mu$ J as recited in independent claims 15, 30, and 33 (Office Action at page 6), according to the Examiner the mean sticking energy of the disclosed resins would inherently be within the claimed range. Applicants respectfully ~~traverse~~ the Examiner's rejection..

Claim 15 of the present application is directed to a cosmetic composition comprising at least one dispersion of insoluble particles of fixing polymer. The same limitation is present in all other pending independent claims, and therefore in all dependent claims. The present invention as claimed thus requires that the particles of fixing polymer be insoluble.

The fixing polymers of Gehman et al. are not insoluble, and therefore the reference fails to teach or suggest this element of the claims of the present invention. To the contrary, the polymers of Gehman et al. are neutralized to achieve a certain degree of water and/or shampoo solubility. (See Gehman et al. at col. 9, lines 45-61).

FINNEGAN  
 HENDERSON  
 FARABOW  
 GARRETT &  
 DUNNER LLC

1300 I Street, NW  
 Washington, DC 20005  
 202.408.4000  
 Fax 202.408.4400  
 www.finnegan.com

PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.0660-00000

The reference contains numerous references to the solubility of the polymers. (See id. at col. 2, line 65 - col. 3, line 10; col. 3, lines 45-46; col. 10, lines 10-12). The polymers of Gehman et al. are clearly not insoluble as required by the present claims. The Examiner has failed to sufficiently establish a claim of anticipation, because he has not shown that the reference discloses each and every element of the claims.

Gehman et al. also cannot be said to render obvious the present claims. The reference contains no disclosure that would suggest to one of ordinary skill in the art that the reference could be modified to arrive at the present invention. In fact, the reference teaches away from the present invention, because it teaches that solubility of the polymer is a desirable property. Gehman et al. do not teach or suggest the presence of at least one aqueous dispersion of insoluble fixing polymer, and therefore fail to anticipate or render obvious the claimed invention. Applicants respectfully request withdrawal of the rejections based on Gehman et al.

**The Claimed Invention Is Not Obvious Over Gehman et al. in View of Nelson**

The Examiner also rejected claims 15-33 as obvious under § 103(a) over Gehman et al. in view of Nelson. According to the Examiner, Nelson discloses hair spray compositions containing methylmethacrylate-methacrylic acid copolymers in aerosol or non-aerosol, aqueous-alcohol containing compositions. The compositions may optionally include silicone plasticizer in the amounts claimed in the present invention. The Examiner asserts that it would be obvious to one skilled in the art to modify the acrylic polymer of Gehman et al. to add the specific amounts of plasticizer in Nelson.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

PATENT  
 Customer No. 22,852  
 Attorney Docket No. 05725.0660-00000

The inclusion of Nelson in the Examiner's analysis does not remedy the deficiencies of Gehman et al. In order to render the claims obvious, the prior art reference or combination of references must teach or suggest all the limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). As noted above, Gehman et al. fail to teach or suggest a composition comprising at least one aqueous dispersion of insoluble fixing polymer, as required by all claims. Nelson does not provide this missing teaching. Rather, Nelson also discloses water-soluble polymers. (See Nelson, col. 1, line 58). The cited references, alone or in combination, do not provide the missing element.

Furthermore, the Examiner has failed to show where either cited reference teaches or suggests the mean sticking energy of the present claims. Inherency may not be relied upon for a finding of obviousness. See *In re Shetty*, 566 F.2d 81, 86 (C.C.P.A. 1977) ("the inherency of an advantage and its obviousness are entirely different questions. That which is inherent is not necessarily known. Obviousness cannot be predicated on what is unknown.")

The Examiner has admitted that Gehman et al. do not disclose the mean sticking energy limitations found in all claims. Nelson does not disclose such a feature, either. Therefore, it is clear that the references do not, alone or in combination, teach or suggest all elements of the claimed invention as required by law. For this reason, Applicants respectfully submit that the references fail to render obvious any of the pending claims, and ask that the Examiner withdraw the rejections based on § 103(a).

FINNEGAN  
 HENDERSON  
 PARABOW  
 GARRETT &  
 DUNNER LLP

1300 I Street, NW  
 Washington, DC 20005  
 202.408.4000  
 Fax 202.408.4400  
 www.finnegan.com

PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.0660-00000

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: February 5, 2002

By: 

Lori-Ann Johnson  
Reg. No. 34,498

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

Application Number: 09/662,078  
Filing Date: November 1, 2000  
Attorney Docket Number: 05725.0660

**APPENDIX TO AMENDMENT OF November 9, 2001**

**Version with Markings to Show Changes Made**

**Amendments to the Claims**

15. A cosmetic composition comprising at least one aqueous dispersion of insoluble particles of fixing polymer, wherein said composition has a mean sticking energy of less than 200 microJoules, and further wherein said mean sticking energy of said composition to [said] keratinous fibers results from drying said composition to said keratinous fibers.

20. A composition according to Claim 15, wherein said at least one [said] aqueous dispersion of insoluble particles of fixing polymer results from the polymerization of at least one monomer chosen from styrene, butadiene, ethylene, propylene, vinyltoluene, vinyl propionate, vinyl alcohol, acrylonitrile, chloroprene, vinyl acetate, urethanes, isoprene, isobutene, vinyl ether, vinyl-pyrrolidone, vinyl imidazole, acids chosen from acrylic, methacrylic, maleic, crotonic and itaconic acids, esters of acrylic, methacrylic, maleic, crotonic and itaconic acids, and amides of acrylic, methacrylic, maleic, crotonic and itaconic acids.

28. A hair-setting lotion, blow-drying lotion, lacquer, mousse or gel comprising at least one aqueous dispersion of insoluble particles of fixing polymer, wherein said [composition] hair-setting lotion, blow-drying lotion, lacquer, mousse or gel has a mean

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.0660

sticking energy of less than 200 microJoules, and further wherein said mean sticking energy of said [composition] hair-setting lotion, blow-drying lotion, lacquer, mousse or gel to [said] keratinous fibers results from drying said hair-setting lotion, blow-drying lotion, lacquer, mousse or gel to said keratinous fibers.

32. A method according to Claim 30, wherein said applying of said composition to said keratinous fibers comprises spraying or vaporizing said composition.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com